TERRITORIAL CENTRAL MUSEUM

SITE

The Museum is situated in a park-like setting typical of the northern limits of the Canadian Shield with its lake on two sides and rock outcroppings covered with birch, spruce and moss. The top of the rock outcroppings provide a 360° view of the surrounding natural landscape and the City of Yellowknife. The site over the years has developed natural pathways from pedestrians and nearby school children exploring the park-like setting, the nearby lagoon and the view from the top of the rocks.

CONCEPT

It is from this summer path system that the concept of the Museum was formed. The natural entrance between the rock outcroppings and the pathways up the low slope faces of the rocks have been developed into the circulation paths for the Museum.

This "indoor street" makes the transition from the natural outdoor areas to the indoor spaces and provides orientation space to prepare the visitor for the adjoining formal exhibitions. It supplies a clear understanding of where the visitor is at all times and through views to the exterior it provides relief from sensory overload for staff and visitors alike.

The dynamics of a pathway that unites and makes accessible all of the spaces in this Museum results in communication with the past, the present and provides information for the future.

The real concept of this Museum then is simply an extension of a natural pathway that provides open accessible meeting and communication spaces for the people of the North. It starts as a simple pathway easily accessible grows into a regional street and taps a global communications network.

POLAR
PAM
212

POLARPAM

23276

TERRITORIAL CENTRAL MUSEUM

DESCRIPTION OF MECHANICAL SYSTEMS

A. GENERAL

Systems of heating, ventilation and humidification will be installed in the Museum Building. Provisions for the addition of refrigerated cooling equipment have also been considered to achieve total air-conditioning in the future.

B. HEATING

1. The heating medium is hot water which is produced by oil fired cast iron packaged boilers installed in the boiler room.
2. Through a two pipe reverse return piping system hot water is conveyed to radiation located below all glazing on exterior exposures and to reheat heating coils installed in the ventilation system.
3. All entrances have force flow heaters thermostatically controlled.
4. Specific rooms or zones have thermostatically controlled radiation or reheat coils to regulate heating output.

C. VENTILATION & HUMIDIFICATION

A built up ventilation unit capable of supplying 100% outside air and providing a minimum of six (6) air changes per hour throughout the building will be installed. The components of this system which will deliver filtered, tempered and humidified air includes:

1. outside air intake
2. return air fan
3. bag type filters
4. a glycol heating coil
5. a packaged air washer to provide humidification
6. supply air fan
7. space for future cooling coil.

A system of low velocity ductwork distributes air to all areas of the building and discharges air through ceiling diffusers or grilles.

The system is designed to provide fresh air requirements, provide adequate humidity control, and deliver tempered and filtered air to satisfy recommended air exchange rates on a year round basis.

D. MISCELLANEOUS EXHAUST SYSTEMS

Exhaust systems will be provided for all washrooms, kitchen and storage rooms.

POLAR
PAM
212

POLARPAM

23276

TERRITORIAL CENTRAL MUSEUM

ELECTRICAL DESIGN

The electrical design of the museum includes underground services for both power and telephone, and thereby eliminates unsightly overhead pole lines near the structure.

The power service, in order to make large conductors or ducts unnecessary, is brought all the way into the building at high voltage, where an indoor substation converts the power to 347/600 Volts (used principally for fans and motors) and 120/208 Volts (used principally for lighting).

A single dual-winding transformer is used to provide both secondary voltages. All equipment is oil-free, (dry type) and as a consequence the reinforced concrete vault which once was required for such services is unnecessary.

The lighting design makes extensive use of the indirect approach, where light sources are concealed as much as possible, and areas are lit by reflected light from the finished surfaces of the building.

The restaurant particularly has been treated in this way, and a very low level of overhead illumination will be employed, in conjunction with table lamps, to provide a comfortable and restful atmosphere.

Exhibit areas are provided with extensive amounts of electrical track, to which fixtures are connected using integral plugs. In general, the fixtures are adjustable, and are supplied in a variety of wattages with a selection of wide and narrow beam lamps.

This arrangement will permit the lighting to be changed as exhibits are changed, without the necessity of rewiring. It will also permit a wide range of different lighting effects to be produced by re-aiming or moving fixtures, or by replacement of one fixture type with another.

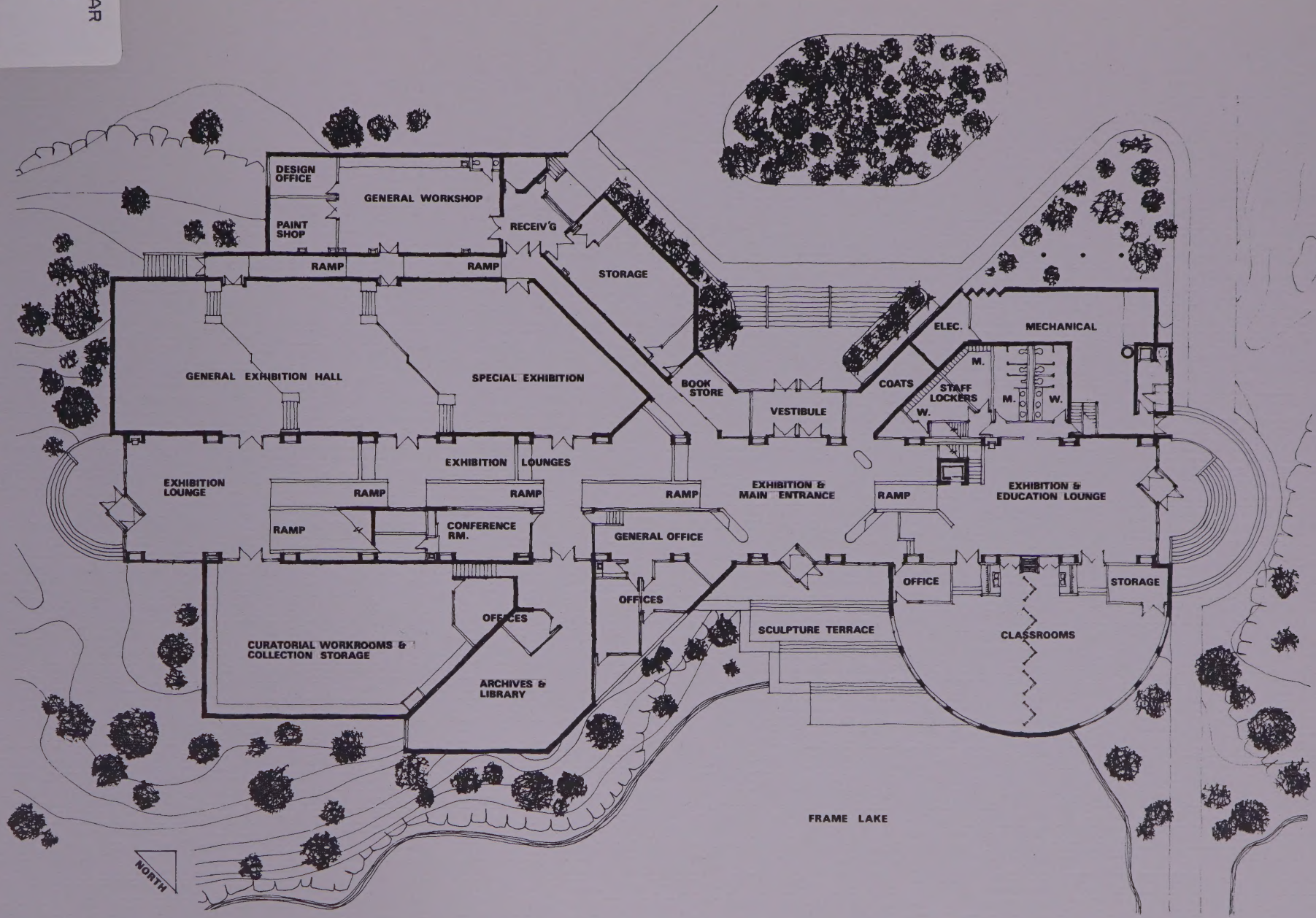
Control of the lighting is achieved through the use of a low voltage control system. This permits control of large areas from central control points, or alternatively, provides for control of single areas from several control points, without requiring the wiring which actually feeds the lighting system to pass through every switch position.

Night lights and emergency lights are provided for times when the museum is unoccupied and for duration of power outages.

A security alarm system and a fire alarm system have also been provided to safeguard the exhibits and protect the building itself.

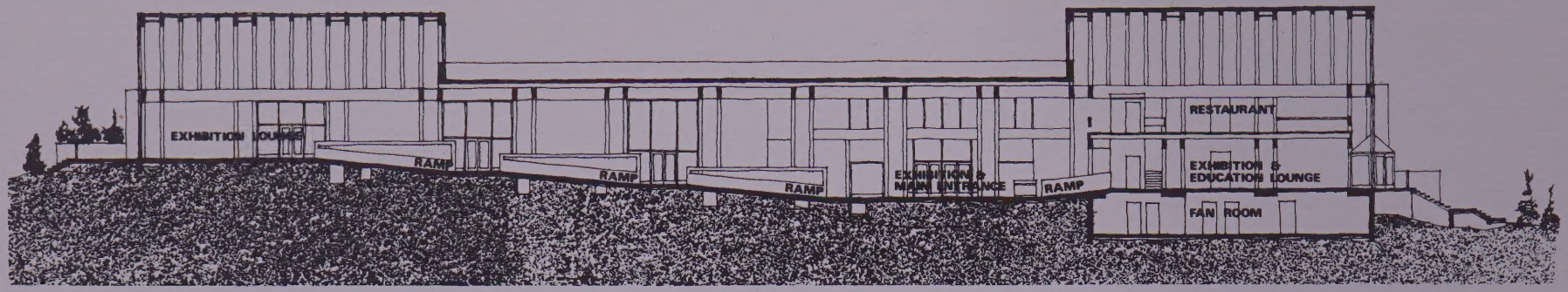
POLAR
PAM
212
POLARPAM

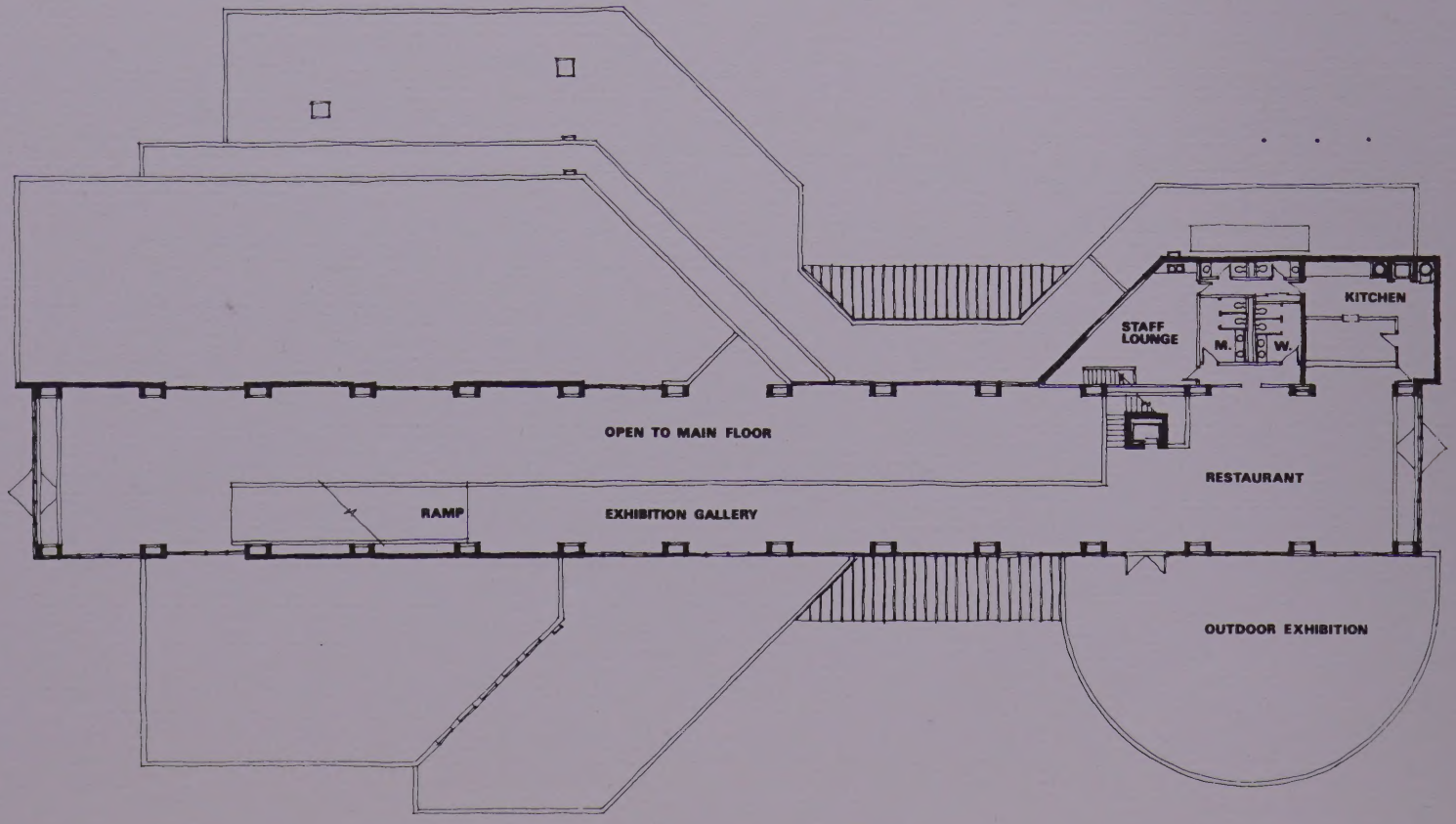
23276



TERRITORIAL CENTRAL MUSEUM — main floor plan

JOHN KEITH KING / architect



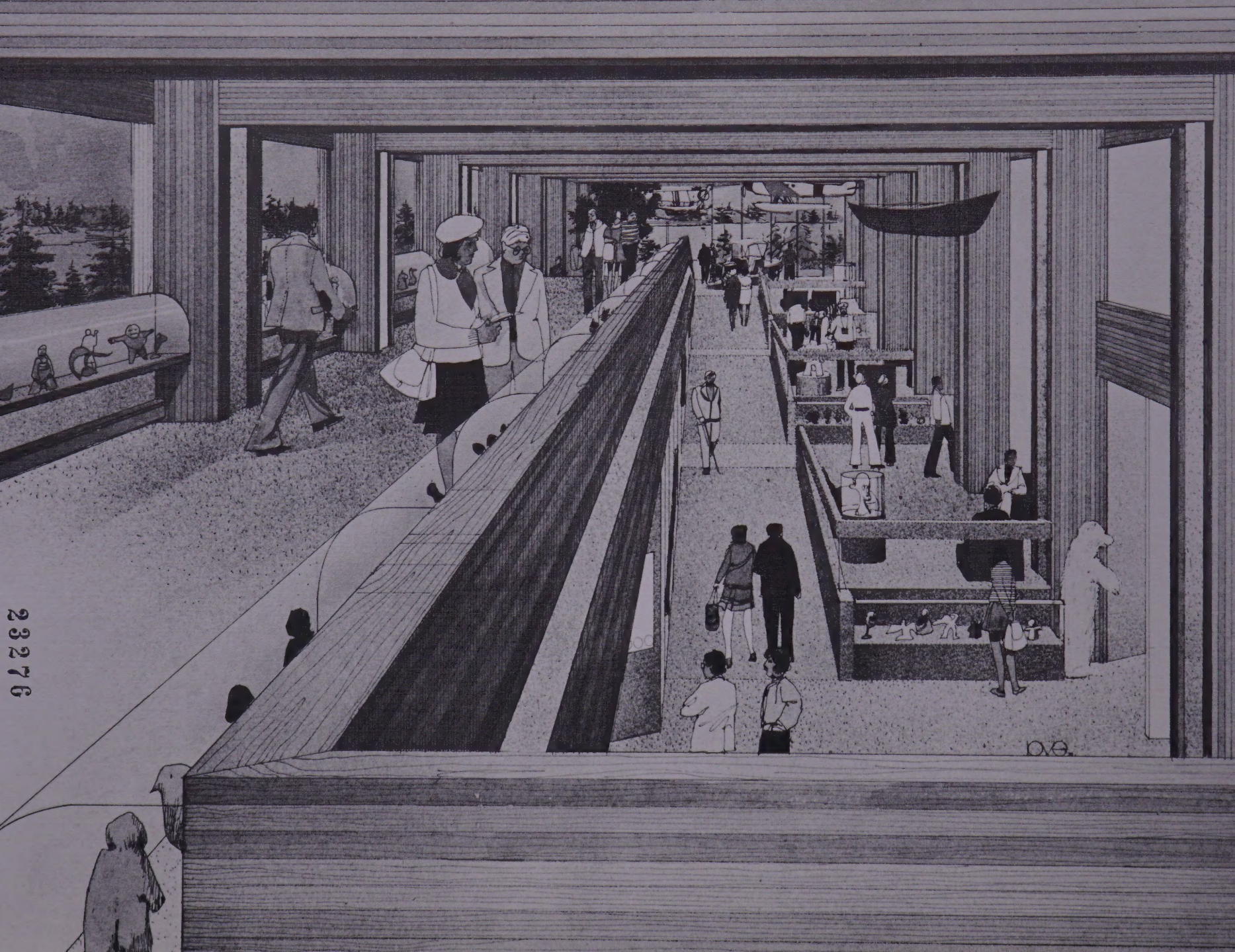


23276

POLAR
PAM
212
POLARPAM

TERRITORIAL CENTRAL MUSEUM — mezzanine plan and section

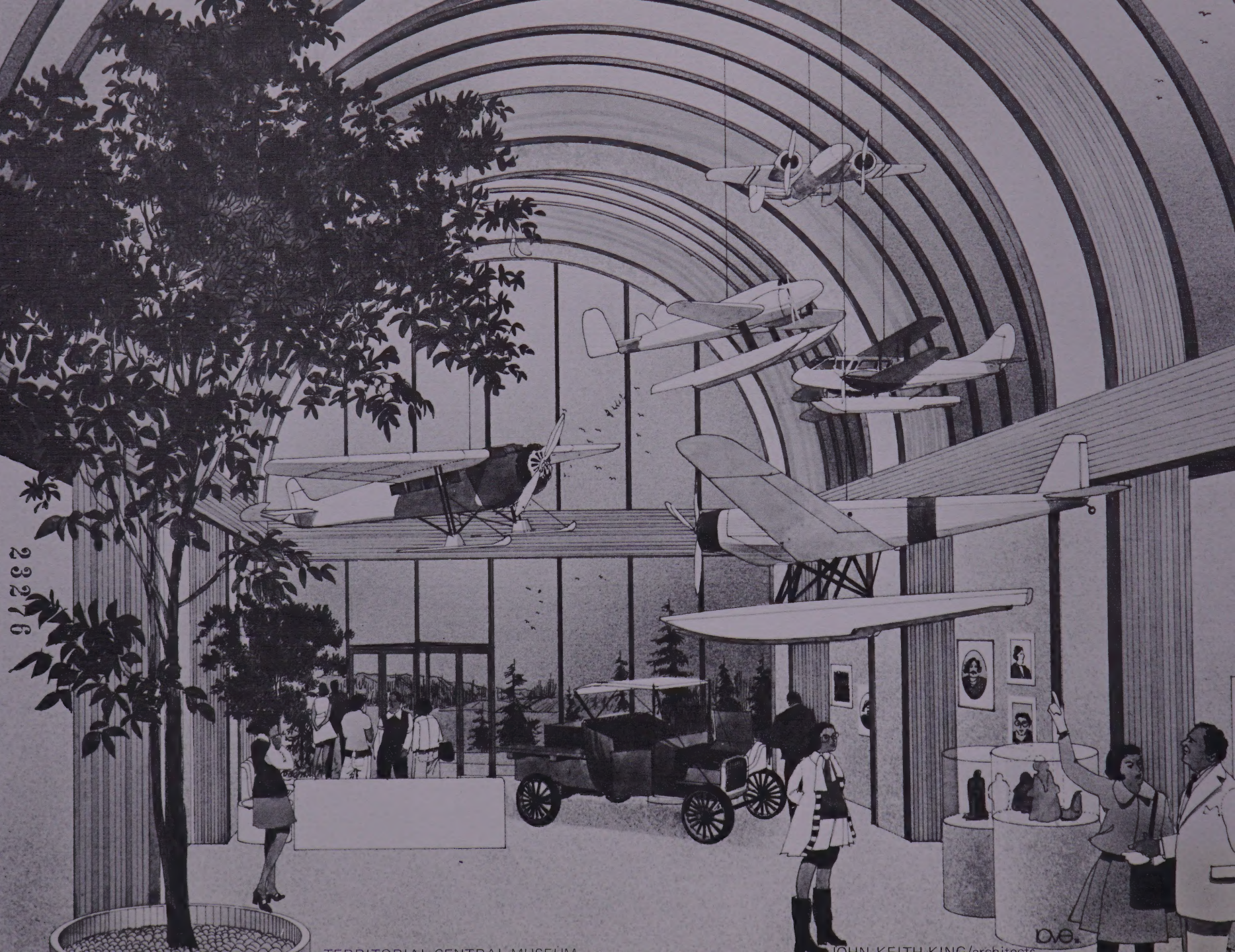
JOHN KEITH-KING/architects



23276

POLAR
PAM
212

POLARPAM


TERRITORIAL CENTRAL MUSEUM
JOHN KEITH KING/architects

POLAR
PAM
212

POLARPAM

POLAR
PAM
212

POLARPAM